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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,898	02/04/2004	Dennis Piper	AFF013USPT02	3891
23403	7590	06/15/2005	EXAMINER	
SHERRILL LAW OFFICES 4756 BANNING AVE SUITE 212 WHITE BEAR LAKE, MN 55110-3205			LINDSEY, RODNEY M	
			ART UNIT	PAPER NUMBER
			3765	

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/771,898

Applicant(s)

PIPER ET AL.

Examiner

Rodney M. Lindsey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/19/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 15, line 1 "313" it appears should be --413--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 8, 11, 14-17 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Lovell. With respect to claim 1 note inner and outer layers 11, 12 or 21, 22 frictionally sliding one with respect to the other. With respect to claim 8 note the position shown in Figure 2. With respect to claim 11 note the use of elastic material to form 23 (see column 5, line 12). With respect to claim 14 note the use of elastic material to form the inner layer 12 or 22 (see column 5, line 12). With respect to claim 15 note the use of inelastic material to form the inner layer 12 or 22 (see column 5, line 8). With respect to claim 16 note the use of elastic material to form the outer layer 11 or 21 (see column 5, line 12). With respect to claim 17 note the use of inelastic material to form the outer layer 11 or 21 (see column 5, line 8). With respect to claim 22 note the rough texture at 25 on inner layer 22.
4. Claims 2-4, 6, 7, 9, 10, 18, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by World patent to Von Holst et al. With respect to claim 2 note inner 3,

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intermediate 4 and outer 2 layers (see Figures 1 and 2) and the frictional sliding as shown in Figure 2. With respect to claim 9 note the position shown in Figure 1. With respect to claim 18 note the use of the elastomer "polyurethane" for the inner layer 3. With respect to claim 19 note the use of polystyrene for the inner layer 3. With respect to claim 21 note the use of plastic for the outer layer 2. With respect to claim 3 note inner 3 and outer 2 layers, and flowable material 4 of air or microspheres or oil intermediate the layers 2, 3 and the sliding as shown in Figure 2. With respect to claim 4 note the use of microspheres. With respect to claim 6 note the use of oil. With respect to claim 7 note the use of air. With respect to claim 10 note the position shown in Figure 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over World patent to Von Holst et al. in view of Marietta. Von Holst et al. do not teach the flowable material being a gel. Marietta teaches that the use of a gel as an intermediate layer is old and well known to those of ordinary skill in the art at the time of the invention (see column 4, line 21). It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the gel of Marietta for the flowable materials at 4 of Von Holst et al. to achieve a like result of enabling relative movement between the inner and outer layers.

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7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over World patent to Von Holst et al. in Lovell. Von Holst et al. do not teach the inner and outer layers being attached by elastic material. Lovell (see column 5, line 2) teaches that the use of elastic material for forming attaching material as at 23 between inner and outer layers is old and well known. It would have been obvious to one of ordinary skill in the art at the time of the invention to form the attaching means at 5 of Von Holst et al. of the elastic material of Lovell to achieve a like result of effecting a resilient and slide permitting connection between the inner and outer layers.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Von Holst et al. in view of Keltner. Von Holst et al. do not teach the inner and outer layers being attached by elastic material. Keltner teaches that the use of elastic material in the form of molded rubber in forming inner and outer layers 26, 38 and the attachment therebetween is old and well known. It would have been obvious to one of ordinary skill in the art at the time of the invention to form the inner and outer layers and thus the attachment between such layers of Von Holst et al. of the rubber elastic material of Keltner to achieve a like result of encompassing a flowable material for absorbing impacts to the head.

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over World patent to Von Holst et al. in view of Lovell. Von Holst et al. do not teach the outer layer being elastic. Lovell (see column 5, line 12) teaches that the use of elastic material for forming an outer layer 11 or 21 is old and well known. It would have been obvious to one of ordinary skill in the art at the time of the invention to form the outer layer of Von Holst et al. of the elastic material of the outer layer of Lovell recognizing the expedience of employing well known shell materials to form a shell.

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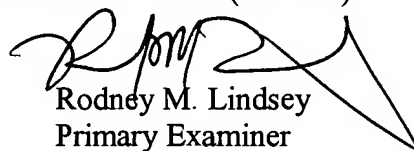
Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note particularly, the slidable helmet layers of Von Holst et al., Madey et al., Phillips, Nakayama et al., Popovich, Sawatzki et al. and Puchalski and the enclosed impact absorbing materials of Lemelson, Thorne, Mendoza, Sperber, Lorenzi et al, Nomiuyama, German publication to Gyory, German publication to Bauer, Ross, Griffiths, Bothwell et al., Lorenzo, Cade, Werner et al. and European patent to Scheuring.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney M. Lindsey whose telephone number is (571) 272-4989. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J. Calvert can be reached on (571) 272-4983. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rodney M. Lindsey
Primary Examiner
Art Unit 3765

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